

**Food and Drug Administration, HHS**

**§ 158.170**

substandard fill specified in §130.14(b) of this chapter, in the manner and form therein prescribed.

[48 FR 3957, Jan. 28, 1983, as amended at 58 FR 2883, Jan. 6, 1993]

**PART 158—FROZEN VEGETABLES**

**Subpart A—General Provisions**

Sec.

158.3 Definitions.

**Subpart B—Requirements for Specific Standardized Frozen Vegetables**

158.170 Frozen peas.

AUTHORITY: 21 U.S.C. 321, 341, 343, 348, 371.

**Subpart A—General Provisions**

**§ 158.3 Definitions.**

For the purposes of this part the following definitions shall apply:

(a) *Lot*. A collection of primary containers or units of the same size, type and style manufactured or packed under similar conditions and handled as a single unit of trade.

(b) *Lot size*. The number of primary containers or units (pounds when in bulk) in the lot.

(c) *Sample size*. The total number of sample units drawn for examination from a lot.

(d) *Sample unit*. A container, a portion of the contents of a container, or a composite mixture of product from small containers that is sufficient for the examination or testing as a single unit.

(e) *Defective*. Any sample unit shall be regarded as defective when the sample unit does not meet the criteria set forth in the standards.

(f) *Acceptance number*. The maximum number of defective sample units permitted in the sample in order to consider the lot as meeting the specified requirements. The following acceptance numbers shall apply:

Lot size (primary container)	Size container	
	<i>n</i> <sup>1</sup>	<i>c</i> <sup>2</sup>
NET WEIGHT EQUAL TO OR LESS THAN 1 KG (2.2 LB)		
4,800 or less .....	13	2
4,801 to 24,000 .....	21	3
24,001 to 48,000 .....	29	4
48,001 to 84,000 .....	48	6

Lot size (primary container)	Size container	
	<i>n</i> <sup>1</sup>	<i>c</i> <sup>2</sup>
84,001 to 144,000 .....	84	9
144,001 to 240,000 .....	126	13
Over 240,000 .....	200	19

NET WEIGHT GREATER THAN 1 KG (2.2 LB)

Number of Pounds		
20,000 or less .....	13	2
More than 20,000 to 100,000 .....	21	3
More than 100,000 to 200,000 .....	29	4
More than 200,000 to 400,000 .....	48	6
More than 400,000 to 600,000 .....	84	9
More than 600,000 to 1,000,000 .....	126	13
More than 1,000,000 .....	200	19

<sup>1</sup> *n*=number of sample units.

<sup>2</sup> *c*=acceptance number.

(g) *Acceptable quality level (AQL)*. The maximum percent of defective sample units permitted in a lot that will be accepted approximately 95 percent of the time.

[42 FR 14461, Mar. 15, 1977]

**Subpart B—Requirements for Specific Standardized Frozen Vegetables**

**§ 158.170 Frozen peas.**

(a) *Identity*—(1) *Product definition*. Frozen peas is the food in “package” form as that term is defined in §1.20 of this chapter, prepared from the succulent seed of the pea plant of the species *Pisum sativum* L. Any suitable variety of pea may be used. It is blanched, drained, and preserved by freezing in such a way that the range of temperature of maximum crystallization is passed quickly. The freezing process shall not be regarded as complete until the product temperature has reached −18 °C (0 °F) or lower at the thermal center, after thermal stabilization. Such food may contain one, or any combination of two or more, of the following safe and suitable optional ingredients:

- (i) Natural and artificial flavors.
- (ii) Condiments such as spices and mint leaves.
- (iii) Dry nutritive carbohydrate sweeteners.
- (iv) Salt.
- (v) Monosodium glutamate and other glutamic acid salts.

(2) *Size specifications*. If size graded, frozen peas shall contain not less than 80 percent by weight of peas of the size

declared or of smaller sizes. The sample unit may not contain more than 20 percent by weight of peas of the next two larger sizes, of which not more than one quarter by weight of such peas may be of the larger of these two sizes, and may contain no peas larger than the next two larger sizes, if such there be. The following sizes and designations shall apply:

Size designation	Round hole sieve size through which peas will pass	
	Millimeters	Inch
Extra small .....	Up to 7.5 .....	0.295
Very small .....	Up to 8.2 .....	.32
Small .....	Up to 8.75 .....	.34
Medium .....	Up to 10.2 .....	.40
Large .....	Over 10.2 .....	.40

(3) *Labeling.* The name of the product is “peas”. The term “early”, “June”, or “early June” shall precede or follow the name in the case of smooth-skin or substantially smooth-skin peas, such as Alaska-type peas. Where the peas are of sweet green wrinkled varieties, the name may include the designation “sweet”, “green”, “wrinkled”, or any combination thereof. The label shall contain the words “frozen” or “quick frozen”. The name of the food shall include a declaration of any flavoring that characterizes the product as specified in § 101.22 of this chapter and a declaration of any condiment such as spices and mint leaves that characterizes the product, e.g., “Spice added”. Where a statement of pea size is made, such statement shall indicate either the size designation as specified in paragraph (a)(2) of this section or the applicable sieve size. However, the optional descriptive words “petite” or “tiny” may be used in conjunction with the product name when an average of 80 percent or more of the peas will pass through a circular opening of a diameter of 8.75 mm (0.34 in) or less for sweet green wrinkled peas and 8.2 mm (0.32 in) for smooth-skin or substantially smooth-skin peas, such as Alaska-type peas.

(4) *Label declaration.* Each of the ingredients used in the food shall be declared on the label as required by the applicable sections of parts 101 and 130 of this chapter.

(b) *Quality.* (1) The standard of quality for frozen peas is as follows:

(i) Not more than 4 percent by weight blond peas, i.e., yellow or white but edible peas;

(ii) Not more than 10 percent by weight blemished peas, i.e., slightly stained or spotted peas;

(iii) Not more than 2 percent by weight seriously blemished peas, i.e., peas that are hard, shrivelled, spotted, discolored or otherwise blemished to an extent that the appearance or eating quality is seriously affected.

(iv) Not more than 15 percent by weight pea fragments, i.e., portions of peas, separated or individual cotyledons, crushed, partial or broken cotyledons and loose skins, but excluding entire intact peas with skins detached;

(v) Not more than 0.5 percent by weight, or more than 12 sq cm (2 sq in) in area, extraneous vegetable material, i.e., vine or leaf or pod material from the pea plant or other such material per sample unit as defined in paragraph (b) of this section.

(vi) The sum of the pea material described in paragraphs (b)(1) (i), (ii), (iii), and (iv) of this section shall not exceed 15 percent.

(vii) For peas that meet the organoleptic and analytical characteristics of sweet green wrinkled varieties:

(a) The alcohol-insoluble solids may not be more than 19 percent based on the procedure set forth in paragraph (b)(3) of this section.

(b) Not more than 15 percent by count of the peas may sink in a solution containing 16 percent salt by weight according to the brine flotation test set forth in paragraph (b)(4) of this section;

(viii) For smooth-skin or substantially smooth-skin varieties the alcohol insoluble solids may not be more than 23 percent based on the procedure set forth in paragraph (b)(3) of this section.

(ix) The quality of a lot shall be considered acceptable when the number of defectives does not exceed the acceptance number in the sampling plans set forth in § 158.3(f).

(2) The sample unit for determining compliance with the requirements of paragraph (b)(1) of this section other than those of paragraphs (b)(1)(vii)(a)

and (b)(1)(viii) of this section, shall be 500 g (17.6 oz). For the determination of alcohol-insoluble solids as specified in paragraph (b)(3) of this section, the container may be the sample unit.

(3) *Alcohol-insoluble solids determination.* (i) Extracting solutions:

(a) One hundred parts of ethanol denatured with five parts of methanol volume to volume (formula 3A denatured alcohol), or

(b) A mixture of 95 parts of formula 3A denatured alcohol and five parts of isopropanol v/v.

(ii) Eighty percent alcohol (8 liters of extracting solutions, specified in paragraph (b)(3)(i) (a) or (b) of this section, diluted to 9.5 liters with water).

(iii) Drying dish—a flat-bottom dish with a tight fitting cover.

(iv) Drying oven—a properly ventilated oven thermostatically controlled at  $100\pm 2$  °C.

(v) Procedure—Transfer frozen contents of package to plastic bag; tie bag securely and immerse in water bath with continuous flow at room temperature. Avoid agitation of bag during thawing by using clamps or weights. When sample completely thaws, remove bag, blot off adhering water, and transfer peas to U.S. No. 8 sieve, using (20 cm.) size for container of less than 3 lb. net weight and (30.5 cm.) for larger quantities. Without shifting peas, incline sieve to aid drainage, drain 2 minutes. With cloth wipe surplus water from lower screen surface. Weigh 250 g. of peas into high-speed blender, add 250 g. of water and blend to smooth paste. For less than 250 g. sample, use entire sample with equal weight of water. Weigh 20 g.  $\pm 10$  mg. of the paste into 250 ml. distillation flask, add 120 ml. of extracting solutions specified in paragraph (b)(3)(i) (a) or (b) of this section, and reflux 30 minutes on steam or water bath or hotplate. Fit into a buchner funnel a filter paper of appropriate size (previously prepared by drying in flatbottom dish for 2 hours in drying oven, covering, cooling in desiccator, and weighing). Apply vacuum to buchner funnel and transfer contents of beaker so as to avoid running over edge of paper. Aspirate to dryness and wash material on filter with 80 percent alcohol until washings are clear and colorless. Transfer paper and alcohol-insol-

uble solids to drying dish used to prepare paper, dry uncovered for 2 hours in drying oven, cover, cool in desiccator, and weigh at once. From this weight deduct weight of dish, cover, and paper. Calculate percent by weight of alcohol-insoluble solids.

(4) *Brine flotation test.* (i) Explanation—The brine flotation test utilizes salt solutions of various specific gravities to separate the peas according to maturity. The brine solutions are based on the percentage by weight of pure salt (NaCl) in solution at 20 °C. In making the test the brine solutions are standardized to the proper specific gravity equivalent to the specified “percent of salt solutions at 20 °C” by using a salometer spindle accurately calibrated at 20 °C. A 250 ml glass beaker or similar receptacle is filled with the brine solution to a depth of approximately 50 mm. The brine solution and sample (100 peas per container) must be at the same temperature and should closely approximate 20 °C.

(ii) Procedure—After carefully removing the skins from the peas, place the peas into the solution. Pieces of peas and loose skins should not be used in making the brine flotation test. If cotyledons divide, use both cotyledons in the test and consider the two separated cotyledons as 1 pea; and, if an odd cotyledon sinks, consider it as one pea. Only peas that sink to the bottom of the receptacle within 10 seconds after immersion are counted as “peas that sink”.

(5) If the quality of the frozen peas falls below the standard prescribed in paragraph (b)(1) of this section, the label shall bear the general statement of substandard quality specified in the Code of Federal Regulations but in lieu of the words prescribed in the second line of the rectangle the following words may be used where the frozen peas fall below the standard in only one respect: “Below standard in quality \_\_\_\_\_”, the blank to be filled in with the specific reason for substandard quality as listed in the standard.

[42 FR 14461, Mar. 15, 1977, as amended at 42 FR 15673, Mar. 22, 1977; 58 FR 2883, Jan. 6, 1993]